AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1-67. (Canceled)

68. (Currently amended) A cleaning robot configured to move in a swimming pool in accordance with commands from a main controller therein, the robot when in use being free of any cables connected to an external power supply, and including:

a body unit ~~with a battery power pack,~~ configured to move along the floor and/or walls of the pool <u>and having a housing with a battery power pack and said main controller disposed therein</u>;

a tail unit comprising a head portion configured to float on the surface of the pool while the body unit is on the floor of the pool, [[the]] <u>said</u> head portion comprising a connector designed for facilitating charging batteries or battery in the battery power pack by an external charger; ~~and~~

a tethering cable attached at least in use, <u>at its one end to said head portion of said</u> <u>tail unit and at its other end</u> to [[the]] <u>said</u> body unit, [[the]] <u>said</u> tethering cable being of sufficient length to allow [[the]] <u>said</u> head portion to float on the surface of the pool while [[the]] <u>said</u> body unit is on the floor of the pool<u>; and</u>

<u>a tail controller disposed in said tail unit and being in communication with the main</u> <u>controller via the tethering cable, the tail controller being electrically connected to said</u> <u>batteries or battery in said battery power pack and being configured to monitor said</u> <u>charging</u>.

69.   (Currently amended) The cleaning robot according to claim [[94]] <u>68</u>, wherein the head portion is configured to submerge below the water surface upon encountering an obstacle.

70.   (Currently amended) The cleaning robot according to claim [[94]] <u>68</u>, wherein the head portion is of a geometry which minimizes the likelihood of entanglement thereof with obstacles.

71.   (Currently amended) The cleaning robot according to claim [[94]] <u>68</u>, the robot being configured to stop at a predetermined location when a predetermined number of wall encounters occur after the battery voltage drops below a predetermined amount.

72.   (Currently amended) The cleaning robot according to claim [[94]] 68, wherein the head portion comprises a float user interface, and is designed such that the float user interface is disposed at or near the surface of the pool, when the tail unit is in its working position.

73.   (Currently amended) The cleaning robot according to claim [[72]] 68, wherein ~~the tail unit further comprises a~~ the tail unit controller is in communication with the main controller via integrated communications cable in said tethering cable.

74.   (Previously presented) The cleaning robot according to claim 72, wherein the float user interface is configured to receive user input.

75.   (Currently amended) The cleaning robot according to claim [[94]] 68, wherein the tail unit further comprises at least one data presentation device.

76.   (Currently amended) The cleaning robot according to claim [[94]] 68, further comprising an external battery charger, which is connectable to the tail unit for charging at least one battery in the battery power pack in the body unit of the robot.

77.   (Previously presented) The cleaning robot according to claim 76, wherein the charger is configured to communicate with the tail unit via a cable, and wherein another cable is used for connecting the tail unit with the battery power pack.

78.   (Previously presented) The cleaning robot according to claim 76, wherein the charger comprises at least one charger-side data presentation unit.

79.   (Currently amended) The cleaning robot according to claim [[94]] 68, the robot including a memory configured to store a certain orientation of the robot in relation to a fixed direction, the controller being configured to provide the robot with a command to align its orientation in accordance with the stored orientation.

80.   (Previously presented) The cleaning robot according to claim 79, wherein the stored orientation is defined by the robot's initial orientation.

81.   (Previously presented) The cleaning robot according to claim 79, further comprising a detector for detecting a wall when impacted by the robot, wherein the alignment of the robot's orientation is performed after at least one wall detection.

82.   (Previously presented) The cleaning robot according to claim 81, further comprising an electro-mechanical drive means, the first controller being configured to detect the current through the drive means, wherein when the current exceeds a threshold, the controller assumes a wall impact to have occurred.

83.   (Previously presented) The cleaning robot as disclosed in claim 82, wherein the threshold is determined by multiplying an average of the current passing through the drive means during one or more traversings of the pool floor by a constant.

84.   (Currently amended) The cleaning robot ~~according to claim 80, wherein the~~ having a controller [[is]] configured to allow the robot to perform a straight lap and a subsequent stepped lap, each between two wall detections, both laps comprising [[the]] an alignment of the robot's orientation in accordance with a stored orientation, the stepped lap also including rotation of the robot through a predetermined angle relative to its orientation during the straight lap, wherein the robot is configured to move along two known mutually angled directions independently of the shape of the swimming pool.

85.   (Previously presented) The cleaning robot according to claim 84, wherein the predetermined angle is 90 degrees.

86.   (Previously presented) The cleaning robot according to claim 84, wherein during the stepped lap, the robot moves for a period constituting a predetermined portion of the duration of the preceding straight lap, the portion being increased after a predetermined number of wall detections.

87.   (Currently amended) The cleaning robot according to claim [[94]] <u>68</u>, wherein the robot is preprogrammed for performing a plurality of cleaning modes, of which at least two are selected from the group consisting of:

the robot scanning the floor surface of the pool, and ascending a sidewall at predetermined time intervals;

the robot including a decreased speed and an increased suction; and

the robot executing a cycle comprising ascending a sidewall to the waterline, cleaning the waterline for a predetermined amount of time in a first direction with relation to the pool, descending the sidewall to the floor, moving along the sidewall a predetermined distance in a second direction which is opposite the first direction, ascending the sidewall, and continuing cleaning in the first direction.

88.   (Currently amended) A cleaning robot configured to move in a swimming pool along two scanning directions obtained by adjusting the orientation of the robot in a predetermined way relative to a reference orientation in relation to a fixed direction, the scanning directions having a predetermined angle therebetween, independently of the swimming pool's shape, the robot having a memory adapted to store the orientation of the robot, and a controller being adapted to provide the robot with a command to align its orientation in accordance with the reference orientation.

89.   (Canceled)

90.   (Currently amended) The cleaning robot according to claim [[89]] 88, wherein the reference orientation is defined by the robot's initial orientation.

91.   (Previously presented) The cleaning robot according to claim 88, wherein the predetermined angle is 90 degrees.

92.   (Previously presented) A cleaning robot configured to move in a swimming pool in accordance with commands from a main controller therein, the robot when in use being free of any cables connected to an external power supply, and including a body unit with a battery power pack, configured to move along the floor and/or walls of the pool, and a tail unit comprising a head portion configured to float on the surface of a pool, and a tethering

cable attached, at least in use, to the body unit; the robot comprising a means for detecting its orientation in relation to a fixed direction.

93.   (Previously presented) The cleaning robot according to claim 92, wherein the means is a digital compass integrated onto the controller.

94.   (Previously presented) A cleaning robot configured to move in a swimming pool in accordance with commands from a main controller therein, the robot when in use being free of any cables connected to an external power supply, comprising:

a body unit with a battery power pack, configured for moving along the floor and/or walls of said pool;

a tail unit comprising a head portion configured to float on the surface of the pool while the body unit is on the floor of the pool, said head portion comprising an antenna configured to receive commands from a wireless remote control unit being configured to perform one or more functions being selected from the group consisting of:

choosing the mode of cleaning operation of the robot;

causing the robot to move in a direction directed by a user and independent of scanning algorithm;

predetermining the cycle time; and

selecting the length of a pool to be scanned; and

a tethering cable attached at least in use, to the body unit, said tethering cable being of sufficient length to allow said head portion to float on the surface of the pool while the body unit is on the floor of the pool.

95.   (Previously presented) The cleaning robot according to claim 94, wherein said head portion further comprises a connector designed for facilitating charging batteries or battery in said battery power pack by an external charger.